



State of Wisconsin  
2009 - 2010 LEGISLATURE

LRB-3485/P5

JTK/RNK/PG/MES:cjs:rs

stays

P6

PRELIMINARY DRAFT - NOT READY FOR INTRODUCTION

Star

Gen Cat

(Regenerate)

1 AN ACT ~~to renumber and amend~~ 13.48 (15); ~~to amend~~ 16.72 (2) (e) (intro.),  
2 ~~16.75 (8) (a) 1., 16.75 (10), 16.84 (5), 101.025 (4) (intro.), 101.027 (2), 101.027 (3)~~  
3 ~~(a) 1., 101.027 (3) (b) 1., 101.65 (1) (a) (intro.) and 119.04 (1); and to create~~ 13.48  
4 ~~(2) (jm), 13.48 (15) (b), 16.84 (1m), 16.85 (3m), 16.856, 20.255 (2) (ed), 66.0902,~~  
5 ~~101.12 (2m), 120.24 and 145.133~~ of the statutes; **relating to:** energy  
6 conservation standards for the construction of certain buildings, energy and  
7 environmental design standards for state ~~office~~ <sup>buildings, structures and</sup> facilities, ~~energy and~~  
8 ~~environmental performance standards for the operation and maintenance of~~  
9 ~~state office facilities,~~ energy and environmental design standards for school  
10 district facilities and other local government buildings, ~~operation and~~  
11 ~~maintenance of state office facilities,~~ leasing of state ~~office~~ <sup>buildings, structures and</sup> facilities, standards

- 1 for the construction and use of graywater systems, granting rule-making  
2 authority, and making an appropriation.

### *Analysis by the Legislative Reference Bureau*

This analysis is not complete. A complete analysis will be provided in a later version.

Currently, with certain exceptions, the Department of Administration (DOA) must ensure that the specifications for each state construction project require the use of recovered and recycled materials to the extent that such use is technically and economically feasible. With certain exceptions, DOA must also prescribe and enforce energy efficiency standards for energy consuming equipment that is installed in connection with state construction projects. The standards must meet or exceed specified statutory standards. The Building Commission must also apply these standards when entering into certain leases on behalf of the state. Current law also requires the commission to employ a design for cogeneration of steam and electricity in state-owned central steam generating facilities unless the commission determines that such a design is not cost-effective and technically feasible. Currently, the commission must also ensure that state-operated steam generating facilities are designed to allow the use of biomass fuels and refuse-derived fuels to the greatest extent cost-effective and technically feasible. In addition, under current law, the commission is prohibited from approving the construction or major remodeling of or addition to any state building or structure unless the building or structure makes maximum practical use of passive solar energy system design elements and, unless not technically or economically feasible, incorporates an active solar energy system or photovoltaic solar energy system or other renewable energy system.

This bill directs DOA and the Building Commission to ensure that the plans and specifications for each project for the construction of any new state office facility containing at least 10,000 gross square feet of office space, or for the repair, renewal, renovation, or expansion of any existing facility for occupancy by any state entity if the facility contains at least 10,000 gross square feet of enclosed office space and the project affects more than 50 percent of the existing gross square feet of enclosed office space in the facility, conform at a minimum to the silver standard for energy and environmental design in construction projects, known as the LEED silver standard

as prescribed by the U.S. Green Building Council ~~as of the day the bill becomes law~~. The bill also directs DOA and the Building Commission to ensure that each such ~~office~~ facility conforms to specific standards specified ~~in the bill~~ that are derived from various national and international building codes ~~as of specified dates~~ for energy performance, ~~use of recycled and recovered materials~~, reuse of demolition materials, ventilation components, indoor air quality performance, and water usage level. The bill also directs the commission to enforce compliance with the bill's requirements with respect to all ~~new facilities containing at least 10,000 gross square feet of office space that are to be constructed and all existing facilities that are to be repaired~~.

building structure or

major state construction project

building structure or

conditioned

building structure or

conditioned

Department of Commerce based upon the standards of the

major construction projects

by Commerce

building structure or

conditioned

requirements under the LEED green building rating system at the silver performance level

enclosed

*whenever*  
~~renewed, renovated, or expanded for occupancy by any state entity if the facilities contain at least 10,000 gross square feet of enclosed office space and the repair, renewal, renovation, or expansion affects more than 50 percent of the existing gross square feet of enclosed office space in the facilities.~~ *whenever the buildings structures or*  
 the facilities are purchased by the state under a purchase agreement or, ~~the~~ construction, repair, renewal, renovation, or expansion is performed for the state under a lease agreement with option to purchase. *being constructed*

*of a buildings structures or facility*  
 The bill also directs the Building Commission to apply all moneys available for its use under the Authorized State Building Program to achieve certification as of January 1, 2015, by the U.S. Green Building Council for not less than 15 percent of the gross square footage of conditioned office space owned or leased by state agencies, as determined by DOA, for meeting the ~~minimum~~ LEED ~~performance standards for operation and maintenance of existing buildings.~~ *standard for existing building operation and maintenance minimum performance requirements*

~~Under current law, DOA has managerial responsibility for the operation and maintenance of state office buildings. With certain exceptions, DOA and other state agencies to which DOA delegates purchasing authority must write purchasing specifications that incorporate requirements for the purchase of products made from recycled and recovered materials if their use is technically and economically feasible. DOA and other agencies and certain state authorities making purchases must, to the extent practicable, make purchasing selections using these specifications. Specific requirements for recycled or recovered content also apply, without exception, to all paper purchases by these agencies and authorities. In addition, currently, each state agency that has building or energy management responsibilities must, to the extent cost-effective and technically feasible, rely upon energy systems that utilize fuels produced in this state.~~

This bill directs DOA to promulgate, apply, and enforce rules that require the environmentally sustainable operation and maintenance of all state office buildings. The rules must specifically address cleaning, purchasing, waste minimization and recycling, energy and water usage efficiency, and light pollution minimization. The rules supercede existing related requirements and unlike current requirements, ~~apply without exception.~~

*by a state agency*  
 Currently, DOA has responsibility for the negotiation and administration of leases of real property by this state, except as otherwise provided by law. The Building Commission has authority to approve leases of real property by the state, except as otherwise provided by law. This bill directs DOA, before entering into any lease, or renewing or extending any lease, for improved real property to be used ~~for office facilities~~ *as determined by commerce*, to require the prospective lessor to disclose the energy use intensity for the total property and the annual energy usage for the total property, calculated in accordance with Energy Star standards, ~~as prescribed by the U.S. Environmental Protection Agency on the day the bill becomes law~~, and to verify and forward that information to the Building Commission. The bill ~~also~~ directs DOA to require other state agencies that have authority to enter into leases for improved real property to obtain and forward the same information to the Building Commission before entering into, or renewing or extending, any lease for real property ~~to be used for office facilities~~. The bill then prohibits the Building Commission from approving any

by this state

at a level sufficient to meet the minimum LRB-3485/P5 threshold for compliance with the LEED green building rating system for existing buildings operation and maintenance

lease for improved real property to be used ~~for office facilities~~ unless DOA certifies to the commission that the energy use intensity for the total property and the annual energy usage for the total property conform to Energy Star standards. ~~In addition~~

The bill directs the Building Commission to require other state agencies that have authority to enter into leases for improved real property, to certify to the commission, before entering into, or renewing or extending, any lease for real property to be used ~~for office facilities~~, that the energy use intensity for the total property and the annual energy usage for the total property conform to ~~Energy Star~~ standards.

For further information see the *state and local* fiscal estimate, which will be printed as an appendix to this bill.

*The people of the state of Wisconsin, represented in senate and assembly, do enact as follows:*

SECTION 1. 13.48 (2) (jm) of the statutes is created to read:

13.48 (2) (jm) 1. The building commission shall not approve the design or

construction of any project for the construction of any ~~facility~~ building structure or for a board, agency,

officer, department, commission, or body corporate, if the ~~facility~~ building structure or after construction

will contain at least 10,000 gross square feet of ~~office~~ conditioned space for occupancy by any such

entity, or for the repair, renewal, renovation, or expansion of any existing ~~facility~~ building structure or for

occupancy by any such entity if the ~~facility~~ building structure or contains at least 10,000 gross square feet

of ~~enclosed office~~ conditioned space and the project affects more than 50 percent of the existing

gross square feet of ~~enclosed office~~ conditioned space in the ~~facility~~ building structure or, regardless of the funding

source of the project, unless the department of administration certifies verifies and ~~all of the~~ to the

~~commission~~ after reviewing the plans and specifications: ~~following~~ all of the following

a. That the project conforms at a minimum to the ~~LEED~~ energy performance for the ~~silver standard~~ requirements under

defined in s. 16.856 (1) (f), for construction projects. green building rating system at the silver level

b. That the energy performance for the project is at least 30 percent better than

the performance ~~under~~ standard prescribed by the department of commerce under ~~standard 90.1-2007~~ s. 10.028 of the American Society of Heating,

Refrigerating and Air Conditioning Engineers, or its most current equivalent ~~as documented by energy modeling~~ based upon

and certified in writing by the chief engineer for the project.

c. That ~~the construction materials for the project are at least 75 percent derived from recycled material, as defined in s. 16.70 (12), or recovered material, as defined in s. 16.70 (11), and at least 75 percent of the demolition materials for any demolition required to undertake the project are used by an agency, as defined in s. 16.70 (1e), or transferred to a 3rd party in recycled or recovered form as a part of another construction project.~~ <sup>from</sup> ~~reused in the project~~ <sup>for reuse</sup> ~~for an agency, as defined in s. 16.70 (1e), or a local governmental unit, as defined in s. 19.42 (7u).~~

d. That the ventilation components for the project are strictly in conformity with ~~standards prescribed by the department of commerce under s. 101.02~~ <sup>base</sup> ~~standard 62.1-2004 of the American Society of Heating, Refrigerating and Air Conditioning Engineers, and the chief engineer for the project certifies in writing that no exemptions from strict conformity with that standard have been authorized.~~ <sup>upon</sup>

e. That the project has an indoor air quality management plan that addresses adherence to the heating, ventilation, and air conditioning performance standards for the project, source control that ensures use of low emission materials and finishes, pathway interruption to prevent migration of contaminants during the construction process, housekeeping procedures to prevent the spread and growth of contaminants during the construction process, and construction activity scheduling to prevent cross contamination of materials used in the project during the construction process. The plan shall be consistent at a minimum with standards ~~and~~ <sup>by the department of commerce under</sup> ~~air quality~~ <sup>s. 101.028 based upon</sup> ~~promulgated by the Sheet Metal and Air Conditioning Contractors' National Association.~~ <sup>indoor air quality guidelines for</sup> ~~air quality~~ <sup>2nd edition, 2007</sup>

f. That the project upon completion will attain a level of ~~water use~~ <sup>interior</sup> ~~no greater than 30 percent below the water use baseline, as determined by the department of~~ <sup>interior</sup> ~~administration assuming that 100 percent of the indoor plumbing fixtures used in the project are in compliance with the strictest applicable standard under the~~ <sup>in accordance with the LEED green building rating systems as defined in s.</sup> ~~Uniform Plumbing Codes - 2006 promulgated by the International Association of~~ <sup>standards promulgated by the department of commerce based upon</sup> <sup>occupied buildings of</sup> <sup>under s. 101.028</sup> <sup>e</sup> <sup>s. 16.856(1)</sup>

## SECTION 1

1 Plumbing and Mechanical Officials or the International Plumbing Codes - 2006  
2 fixture and fitting performance requirements promulgated by the International  
3 Code Council ~~as determined by the department.~~

4 (3.2) The building commission shall not enter into an agreement for the purchase  
5 of or for the lease of, or renewal of a lease of, with option to purchase, any ~~facility~~ <sup>building structure or</sup> that  
6 is constructed or to be constructed for occupancy by any board, agency, officer,  
7 department, commission, or body corporate, if the ~~facility~~ <sup>building structure or</sup> after construction will  
8 contain at least 10,000 gross square feet of ~~office~~ <sup>conditioned</sup> space for occupancy by any such  
9 entity, or any ~~facility~~ <sup>building structure or</sup> that is to be repaired, renewed, renovated, or expanded for  
10 occupancy by any such entity if the ~~facility~~ <sup>building structure or</sup> contains at least 10,000 gross square feet  
11 of ~~enclosed office~~ <sup>conditioned</sup> space and the repair, renewal, renovation, or expansion affects  
12 more than 50 percent of the existing gross square feet of ~~enclosed office~~ <sup>conditioned</sup> space in the  
13 ~~facility~~ <sup>building structure or</sup>, regardless of the funding source of the agreement, unless the department of  
14 administration <sup>verifies and</sup> certifies that the ~~facility~~ <sup>building structure or</sup> conforms or will after construction, repair,  
15 renewal, renovation or expansion conform to all of the standards specified in subd.

16 (A2.)

17 (4.3) The building commission shall apply all moneys available for its use under  
18 the authorized state building program to achieve certification as of January 1, 2015,  
19 by the U.S. Green Building Council for not less than 15 percent of the total gross  
20 square footage of ~~conditioned~~ <sup>building structures and</sup> space in ~~the~~ facilities that are owned or leased by

21 agencies on that date, as determined by the department of administration under s.  
22 16.856 (3), for meeting the minimum LEED performance ~~standards~~ <sup>requirements</sup> for the operation  
23 and maintenance of existing buildings, as defined in s. 16.856 (1) (a). <sup>In this</sup>

24 subdivision, "conditioned space" means space that is designed to have controlled  
25 environmental conditions.

1 SECTION 2. 13.48 (15) of the statutes is renumbered 13.48 (15) (a) and amended  
2 to read:

3 13.48 (15) (a) Subject to the requirements of par. (b) and s. 20.924 (1) (i), the  
4 building commission shall have the authority to acquire leasehold interests in land  
5 and buildings where such authority is not otherwise provided to an agency by law.

6 SECTION 3. 13.48 (15) (b) of the statutes is created to read:

7 ~~13.48 (15) (b) 1. In this paragraph, "Energy Star standards" means the~~  
8 ~~standards prescribed by the U.S. Environmental Protection Agency under 42 USC~~  
9 ~~7403 (g) for energy usage in buildings that are in effect on the effective date of this~~  
10 ~~subdivision. [LRB inserts date].~~

11 ~~The building commission shall not approve the leasing of, or the renewal or~~  
12 ~~extension of any lease for, property for use as office facilities by this state unless the~~  
13 ~~department of administration has certified to the commission that the energy use~~

14 ~~intensity for the total property and the annual energy usage for the total property~~  
15 ~~conform to the minimum LEED ~~energy~~ performance ~~standards~~ for the operation~~  
16 ~~and maintenance of existing buildings.~~

17 ~~agencies, as defined in s. 16.70 (1e), that have authority to lease real property, to~~  
18 ~~certify to the commission, before entering into, or renewing or extending, any lease~~

19 ~~of property to be used for office facilities, that the energy use intensity for the total~~  
20 ~~property and the annual energy usage for the total property conform to Energy Star~~

21 ~~standards.~~

22 SECTION 4. 16.72 (2) (e) (intro.) of the statutes is amended to read:

23 16.72 (2) (e) (intro.) ~~In~~ Except as otherwise provided in this paragraph, in  
24 writing the specifications under this subsection, the department and any other  
25 designated purchasing agent under s. 16.71 (1) shall incorporate requirements for  
the purchase of products made from recycled materials and recovered materials if

Standards promulgated by the department of administration under s. 10.028 based upon Energy Star standards consistent with

requirements for the operation and maintenance of existing buildings.

the same standards.



1 ~~their use is technically and economically feasible.~~ Each authority other than the  
2 University of Wisconsin Hospitals and Clinics Authority, the Lower Fox River  
3 Remediation Authority, and the Health Insurance Risk-Sharing Plan Authority, in  
4 writing specifications for purchasing by the authority, shall incorporate  
5 requirements for the purchase of products made from recycled materials and  
6 recovered materials ~~if their use is technically and economically feasible.~~ Except as  
7 otherwise required in a rule promulgated under s. 16.84 (1m), the requirements  
8 under this paragraph do not apply if the department, purchasing agent, or authority  
9 determines that the use of products made from recycled and recovered materials  
10 would not be technically and economically feasible. The specifications shall include  
11 requirements for the purchase of the following materials:

12 **SECTION 5.** 16.75 (8) (a)1. of the statutes is amended to read:

13 16.75 (8) (a) 1. The Except as otherwise provided in this subdivision, the  
14 department, any other designated purchasing agent under s. 16.71 (1), any agency  
15 making purchases under s. 16.74, and each authority other than the University of  
16 Wisconsin Hospitals and Clinics Authority, the Lower Fox River Remediation  
17 Authority, and the Health Insurance Risk-Sharing Plan Authority shall, to the  
18 extent practicable, make purchasing selections using specifications developed under  
19 s. 16.72 (2) (e) to maximize the purchase of materials utilizing recycled materials and  
20 recovered materials. Except as otherwise required in a rule promulgated under s.  
21 16.84 (1m), the requirements under this subdivision do not apply to the extent that  
22 the department, purchasing agent, agency, or authority determines that meeting  
23 those requirements would not be practicable.

24 **SECTION 6.** ~~16.75 (10) of the statutes is amended to read:~~



1        **16.75 (10)** ~~An~~ Except as otherwise provided in this subsection, an agency that  
2        has building, fleet or energy management responsibilities shall, ~~to the extent~~  
3        ~~cost-effective and technically feasible, rely upon energy systems that utilize fuels~~  
4        ~~produced in this state. Except as otherwise required in a rule promulgated under s.~~  
5        ~~16.84 (1m), the requirements under this subsection do not apply to the extent that~~  
6        ~~the agency having responsibility for compliance with this subsection determines that~~  
7        ~~meeting those requirements would not be cost-effective or technically feasible.~~ In  
8        reviewing bids for the purchase of fuels or energy systems or equipment, the agency  
9        shall purchase fuel or energy systems or equipment produced in this state if the cost  
10       of the lowest responsible bid for such fuel or energy systems or equipment is no  
11       greater than the lowest responsible bid for fuel or energy systems or equipment  
12       produced outside of this state.

13        **SECTION 7.** 16.84 (1m) of the statutes is created to read:

14        **16.84 (1m)** Promulgate, apply, and enforce rules that require, without  
15        exception, the environmentally sustainable operation and maintenance of all state  
16        office buildings. The rules shall specifically address cleaning, purchasing, waste  
17        minimization and recycling, energy and water usage efficiency, and light pollution  
18        minimization.

19        **SECTION 8.** 16.84 (5) of the statutes is amended to read:

20        **16.84 (5)** Have responsibility, subject to approval of the governor, for all  
21        functions relating to the leasing, acquisition, allocation and utilization of all real  
22        property by the state, except where such responsibility is otherwise provided by the  
23        statutes. ~~In this connection, the~~ Prior to entering into any lease, or renewing or  
24        extending any lease, for property to be used <sup>by this state</sup> ~~for office facilities,~~ the department shall  
25        require the prospective lessor to disclose the energy use intensity for the total

*consistent with*

property, measured on a square foot basis, and the annual energy usage for the total property, calculated in accordance with Energy Star standards, as defined in s. 13.48 (15) (b), *Standard provided by the department committee chair s. 101.028* shall verify and certify this information to the building commission *based upon* before the commission considers approval of the lease, or the renewal or extension of the lease. The department shall also require other agencies, as defined in s. 16.70 (1e), that have authority to enter into leases for real property to obtain, verify, and certify the same information to the commission before entering into any lease, or *for the operation and maintenance of existing buildings as defined in s. 16.856 (1)(h).* renewing or extending any lease, for property to be used *by those agencies* for office facilities. The department shall, with the governor's approval, require physical consolidation of office space utilized by any executive branch agency having fewer than 50 authorized full-time equivalent positions with office space utilized by another executive branch agency, whenever feasible. The department shall lease or acquire office space for legislative offices or legislative service agencies at the direction of the joint committee on legislative organization. In this subsection, "executive branch agency" has the meaning given in s. 16.70 (4).

SECTION 9. 16.85 (3m) of the statutes is created to read:

16.85 (3m) To appoint or approve the appointment of a chief engineer for each major *(g)* office construction project, as defined in s. 16.856 (1) *(g)*.

SECTION 10. 16.856 of the statutes is created to read:

16.856 Energy and environmental design standards for state *certain* facilities. (1) In this section: *buildings, structures and*

(a) "Agency" has the meaning given in s. 16.70 (1e).

*INS 10-22* (c) *conditioned space* means space that is designed to have controlled environmental conditions.

*INS 10-23* (g) "Major office construction project" means a project for the construction of a state building that will, upon completion of the project, contain at least 10,000 gross square feet of *conditioned* enclosed office space or for the repair, renewal, renovation, or

material moved from p. 11

expansion of an existing state building containing at least 10,000 gross square feet of ~~enclosed office~~ <sup>conditioned</sup> space that affects more than 50 percent of the existing gross square feet of ~~enclosed office~~ <sup>conditioned</sup> space in that building. <sup>performance level designated as the silver level</sup> <sup>structure or facility</sup> <sup>under the</sup>

(e) "LEED building rating system" means the <sup>green</sup> rating system of the U.S. Green Building Council designated as the leadership in energy and environmental design system or its <sup>current equivalent</sup> ~~successor system~~ as determined by the department <sup>of commerce</sup> <sup>under s. 101.021</sup>

(f) "LEED silver <sup>level</sup> ~~standard~~" means the LEED <sup>green</sup> building rating system <sup>standard</sup> designated by the U.S. Green Building Council as the <sup>current equivalent</sup> ~~silver standard in effect on the~~ effective date of this paragraph <sup>as determined</sup> ~~[LRB inserts date]~~ or its ~~successor standard~~ as determined by the department <sup>of commerce under s. 101.028</sup>

(h) "Minimum LEED performance <sup>requirements</sup> ~~standards~~ for the operation and maintenance of existing buildings" means the performance <sup>requirements</sup> ~~standards~~ so designated under the LEED <sup>green</sup> building rating system, as prescribed by the U.S. Green Building Council <sup>or its current equivalent</sup> ~~[in effect on the effective date of this paragraph ... LRB inserts date] or~~ ~~their successor standards~~ as determined by the department <sup>of commerce</sup> <sup>under s. 101.02</sup>

(2) The department shall ensure that the plans and specifications for each major ~~of the~~ <sup>requirements for certification at the level</sup> construction project conform at a minimum to the LEED silver ~~standard~~ <sup>of construction</sup>. The department shall also ensure that the energy performance, use and disposal of construction materials, ventilation components, indoor air quality performance, and water usage level for each major ~~of the~~ construction project conform to the standards specified s. 13.48 (2) (jm) <sup>2.</sup>

(3) The department shall maintain a current inventory of the location and gross square footage of all ~~office~~ <sup>the conditioned space in</sup> facilities that are owned or leased by any agency for its use or the use of another agency. The inventory shall include for each facility <sup>buildings, structures, and</sup> information concerning the conditioned space <sup>building, structure, or</sup> ~~as defined in s. 13.48 (2) (jm) 8.~~ in the

more pars. (c) and (d) to p. 10

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11-1-10

building, structure, or

requirements

1 facility and whether the facility or any portion thereof is certified or eligible for  
2 certification by the U.S. Green Building Council as meeting the minimum LEED  
3 performance standards for the operation and maintenance of existing buildings.

4 ~~(4) The department shall maintain a current copy of the standards specified~~  
5 ~~in s. 13.48 (2) (jm) 1. and (15) (b) 1. and sub. (1) (d) and (e) on file in its offices and~~  
6 ~~make copies of the standards available for public inspection and copying.~~

7 **SECTION 11.** 20.255 (2) (ed) of the statutes is created to read:

8 20.255 (2) (ed) *LEED fees.* A sum sufficient to pay LEED registration and  
9 certification fees on behalf of school districts under s. 120.24.

10 **SECTION 12.** 66.0902 of the statutes is created to read:

11 **66.0902 Energy and environmental design standards for political**  
12 **subdivision facilities.** (1) In this section:

13 (a) "ASHRAE standards" means standard 90.1-2004<sup>2007</sup> of the American Society  
14 of Heating, Refrigerating and Air Conditioning Engineers.

15 (b) "IECC standards" means the most current national energy efficiency design  
16 standards of the International Energy Conservation Code <sup>Ⓢ</sup>

17 (c) "Major construction project" means a project for the construction of a public  
18 building by or for a political subdivision that will, upon completion of the project,  
19 contain at least 10,000 gross square feet of enclosed office space or for the repair,  
20 renewal, renovation, or expansion of an existing public building by or for a political  
21 subdivision containing at least 10,000 gross square feet of enclosed office space that  
22 affects more than 50 percent of the existing gross square feet of enclosed office space  
23 in that building.

24 (d) "Political subdivision" means any city, village, town, or county.

(2) A political subdivision shall ensure that a major construction project meets one of the following standards, based on the year in which the project begins:

(a) For a project that begins on or after the first day of the 7th month after the effective date of this paragraph .... [LRB inserts date], but before January 1, 2015, the energy performance for the project shall be at least 30 percent better than the performance under the ASHRAE standards and the IECC standards.

\*\*\*\*NOTE: Who or what determines when a project "begins"?

(b) For a project that begins after December 31, 2014, but before January 1, 2020, the energy performance for the project shall be at least 70 percent better than the performance under the ASHRAE standards and the IECC standards.

(c) For a project that begins after December 31, 2019, but before January 1, 2025, the energy performance for the project shall be at least 80 percent better than the performance under the ASHRAE standards and the IECC standards.

(d) For a project that begins after December 31, 2024, but before January 1, 2030, the energy performance for the project shall be at least 90 percent better than the performance under the ASHRAE standards and the IECC standards.

(e) For a project that begins after December 31, 2029, the energy performance for the project shall be at 100 percent better than the performance under the ASHRAE standards and the IECC standards, such that the energy performance of the project is carbon neutral.

SECTION 13. 101.025 (4) (intro.) of the statutes is amended to read:

101.025 (4) (intro.) For ventilation systems in public buildings and places of employment, the department shall adopt promulgate rules setting that incorporate standard 62.1-2007 <sup>or its current equivalent</sup> of the American Society of Heating, Refrigerating and Air Conditioning Engineers and that set all of the following:

5 and 101.025 (4) (ag) (intro.) as renumbered is

101.025  
renumbered (4) (ag) ~~INTRO. 101.025~~

insert  
13-19  
RK

21 fix  
component

insert  
13-24  
RK

1           **SECTION 14.** 101.027 (2) of the statutes is amended to read:

2           101.027 (2) The department shall review the energy conservation code and  
3 shall promulgate rules that change the requirements of the energy conservation code  
4 to improve energy conservation. No rule may be promulgated that has not taken into  
5 account the cost of the energy conservation code requirement, as changed by the rule,  
6 in relationship to the benefits derived from that requirement, including the  
7 reasonably foreseeable economic and environmental benefits to the state from any  
8 reduction in the use of imported fossil fuel. The proposed rules changing the energy  
9 conservation code shall be submitted to the legislature in the manner provided under  
10 s. 227.19. In conducting a review under this subsection, the department shall  
11 ~~consider incorporating~~ incorporate, into the energy conservation code, ~~design~~  
12 ~~requirements from~~ standard 90.1-2007 of the <sup>plain comma</sup> ~~most current national energy~~  
13 ~~efficiency design standards, including the International Energy Conservation Code~~  
14 ~~or an energy efficiency code other than the International Energy Conservation Code~~  
15 ~~if that energy efficiency code is used to prescribe design requirements for the purpose~~  
16 ~~of conserving energy in buildings and is generally accepted and used by engineers~~  
17 ~~and the construction industry American Society of Heating, Refrigerating and Air~~  
18 ~~Conditioning Engineers.~~ or its current equivalent,

19           **SECTION 15.** 101.027 (3) (a) 1. of the statutes is amended to read:

20           101.027 (3) (a) 1. A revision of standard 90.1-2007 of the <sup>or its current equivalent,</sup> ~~International Energy~~  
21 ~~Conservation Code American Society of Heating, Refrigerating and Air Conditioning~~  
22 ~~Engineers~~ is published.

23           **SECTION 16.** 101.027 (3) (b) 1. of the statutes is amended to read:

24           101.027 (3) (b) 1. If the department begins a review under sub. (2) because a  
25 revision of standard 90.1-2007 of the ~~International Energy Conservation Code~~

or its current equivalent,

1 American Society of Heating, Refrigerating and Air Conditioning Engineers is  
2 published, the department shall complete its review of the energy conservation code,  
3 as defined in sub. (1), and submit to the legislature proposed rules changing the  
4 energy conservation code, as defined in sub. (1), no later than 18 months after the  
5 date on which the revision of standard 90.1-2007 <sup>or its current equivalent,</sup> of the International Energy  
6 Conservation Code American Society of Heating, Refrigerating and Air Conditioning  
7 Engineers published. (is) ← PLAIN

8 **SECTION 17.** 101.12 (2m) of the statutes is created to read:

9 101.12 (2m) The department may not approve or accept essential drawings,  
10 calculations, specifications, or plans for public buildings, public structures, or places  
11 of employment unless the drawings, calculations, specifications, and plans conform  
12 at a minimum to standard 189 of the American Society of Heating, Refrigeration and  
13 Air Conditioning Engineers.

\*\*\*\*NOTE: Because standard 189 is not yet final, the reference to this standard in  
this provision does not include a publication year. This raises a constitutional question  
about whether the reference to a nonfinal standard of a private organization is an  
improper delegation of legislative authority to that private organization.

14 **SECTION 18.** 101.65 (1) (a) (intro.) of the statutes is amended to read:

15 101.65 (1) (a) (intro.) Exercise jurisdiction over the construction and inspection  
16 of new dwellings by passage of ordinances, provided such ordinances meet the  
17 requirements of the one- and 2-family dwelling code adopted in accordance with this  
18 subchapter. An ordinance under this paragraph may exceed the requirements of the  
19 one- and 2-family dwelling code that relate to energy conservation in the  
20 construction of new dwellings. Except as provided by s. 101.651, a county ordinance  
21 shall apply in any city, village or town which has not enacted such ordinance.

22 **SECTION 19.** 119.04 (1) of the statutes, as affected by 2009 Wisconsin Act <sup>S</sup> 28,  
23 is amended to read:

60 and 96



118.075A

119.04 (1) Subchapters IV, V and VII of ch. 115, ch. 121 and ss. 66.0235 (3) (c), 66.0603 (1m) to (3), 115.01 (1) and (2), 115.28, 115.31, 115.33, 115.34, 115.343, 115.345, 115.361, 115.365 (3), 115.38 (2), 115.445, 115.45, 118.001 to 118.04, 118.045, 118.06, 118.07, 118.10, 118.12, 118.125 to 118.14, 118.145 (4), 118.15, 118.153, 118.16, 118.162, 118.163, 118.164, 118.18, 118.19, 118.20, 118.24 (1), (2) (c) to (f), (6) and (8), 118.255, 118.258, 118.291, 118.30 to 118.43, 118.51, 118.52, 118.55, 120.12 (5) and (15) to (25), 120.125, 120.13 (1), (2) (b) to (g), (3), (14), (17) to (19), (26), (34), (35), (37), (37m), and (38), 120.14, 120.21 (3), 120.24, and 120.25 are applicable to a 1st class city school district and board.

PLAIN

118.225

**SECTION 20.** 120.24 of the statutes is created to read:

**120.24 Energy and environmental design standards for school district facilities.** (1) In this section:

(a) "Major construction project" means a project for the construction of a building containing at least 10,000 square feet of enclosed space.

(b) "LEED building rating system" means the rating system of the U.S. Green Building Council designated as the leadership in energy and environmental design system or its successor system as determined by the department.

(c) "LEED silver standard" means the LEED building rating system standard designated by the U.S. Green Building Council as the silver standard in effect on the effective date of this paragraph .... [LRB inserts date], or its successor standard as determined by the department.

(2) Each school board shall ensure that the plans and specifications for each major construction project conform at a minimum to the LEED silver standard of construction.

1           (3) Upon request, the department shall pay necessary LEED registration and  
2       certification fees for a major construction project on behalf of a school district. The  
3       department shall pay the fees from the appropriation under s. 20.255 (2) (ed).

4           **SECTION 21.** 145.133 of the statutes is created to read:

5           **145.133 Graywater systems.** (1) In this section, "graywater" means  
6       wastewater generated from the residential use of a clothes washer, sink, shower, or  
7       bathtub.

8           \*\*\*\*NOTE: Is this definition consistent with your intent?

9           (2) The department shall promulgate rules that establish standards for the  
10       installation and use of graywater systems for the reuse of graywater within the  
11       boundary of the property from which the graywater was generated.

12           \*\*\*\*NOTE: Your instructions with regard to graywater systems referred to a number  
13       of statute models from other states and organizations. If you would like this provision  
14       to provide more specific guidance to the Department of Commerce about the  
15       requirements of such systems, please let me know what you would like these  
16       requirements to include.

17           **SECTION 22. Nonstatutory provisions.**

18           (1) No later than the 30th day beginning after the effective date of this  
19       subsection, the Department of Administration shall file with the Legislative  
20       Reference Bureau a copy of the text of the standards specified in sections 13.48 (2)  
21       (jm) 1. and (15) (b) 1. and 16.856 (1) (d) and (e) of the statutes, as created by this act.  
22       Upon receipt of the copy, the Legislative Reference Bureau shall publish in the  
23       Wisconsin Administrative Register a notice that the text of the standards are on file  
24       at the offices of the department and the bureau.

25           **SECTION 23. Initial applicability.**

2. and 3.

1 (1) The treatment of section 13.48 (2) (jm) ~~2. and 3.~~ of the statutes first applies  
2 with respect to projects approved and agreements entered into on the effective date  
3 of this subsection.

4 (2) The treatment of section 16.856 (2) of the statutes first applies with respect  
5 to projects for which design is commenced on the effective date of this subsection.

6 (3) The treatment of section 16.84 (5) of the statutes, the renumbering and  
7 amendment of section 13.48 (15) of the statutes, and the creation of section 13.48 (15)  
8 (b) of the statutes first apply with respect to leases of real property by the state that  
9 are entered into, renewed, or extended on the effective date of this subsection.

10 (4) The treatment of section 120.24 of the statutes first applies with respect to  
11 projects for which design is commenced on the effective date of this subsection.

12 (END)

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LRB-3485/P6inJTK  
JTK.....

INS 4A:

*that are constructed by or for the state*

The bill also requires DOA, with limited exceptions, to ensure that major state buildings, structures, and facilities that are constructed by or for the state conform to specified energy performance standards at increasingly stringent levels by specified dates beginning on the first day of the 7th month beginning after the day the act resulting from the bill becomes law and ending on January 1, 2030, by which date all major state buildings, structures, and facilities must achieve a zero net energy level of energy performance. In addition, the bill directs DOA to report annually to the governor and the Building Commission concerning the percentage level of adherence to the requirements imposed upon DOA under the bill that become effective on a date later than the end of that year and the percentage level of adherence to the requirement imposed upon the Building Commission to apply all moneys available to the commission to achieve certification for at least 15 percent of conditioned space in existing owned or leased state buildings, structures, or facilities as meeting the LEED energy performance standards specified in the bill.

*the preceding*

INS 4-1:

✓ ✓  
1. In this paragraph, "conditioned space" means space that is designed to have controlled environmental conditions.

INS 10-22:

*028*

(b) "ASHRAE standard" means the standard promulgated by the department of commerce under s. 101.28 based upon standard 90.1- 2004<sup>7</sup> of the American Society of Heating, Refrigerating and Air Conditioning Engineers or its current equivalent as determined by the department of commerce under s. 101.28.

*028*

INS 10-23:

(d) "IECC standards" means the energy efficiency design standards promulgated by the department of commerce under s. 101.28 based upon the national energy efficiency design standards of the International Energy Conservation Code or their current equivalents.

as determined by the department of commerce under s. 101.028

INS 11-15:

(i) "Zero net energy" means an energy consumption level under which a building, structure or facility produces as much energy for electricity, heating, and cooling from renewable sources in any calendar year as the building, structure, or facility consumes during the same period.

INS 12-6:

(4) Except as provided in sub. (5), the department shall ensure that each building, structure, or facility that is constructed by or for the state <sup>and</sup> designated as a major construction project conforms to <sup>whichever of the</sup> the following energy performance standards, <sup>applies</sup> based upon the year in which construction of the building, structure, or facility: ★

(a) For a building, structure, or facility the construction of which begins on or after the first day of the 7th month beginning after the effective date of this paragraph.... [LRB inserts date] <sup>e</sup> but before January 1, 2015, the energy performance for the building, structure, or facility shall be at least ~~10~~ <sup>30</sup> percent better than the energy performance under the ASHRAE standard or the IECC standards, whichever is the most stringent.

(b) For a building, structure, or facility the construction of which begins after December 31, 2014, but before January 1, 2020, the energy performance for the building, structure, or facility shall be at least 70 percent better than the performance under the ASHRAE standard or the IECC standards, whichever is the most stringent.

(c) For a building, structure, or facility the construction of which begins after December 31, 2009, but before January 1, 2025, the energy performance for the building, structure, or facility shall be at least 80 percent better than the energy performance under the ASHRAE standard or the IECC standards, whichever is the most stringent.

STET: leave as typed

(d) For a building, structure, or facility the construction of which begins after December 31, 2024, but before January 1, 2030, the energy performance for the building, structure, or facility shall be at least 90 percent better than the energy performance under the ASHRAE standard or the IECC standards, whichever is the most stringent.

(e) For a building, structure, or facility the construction of which begins after December 31, 2029, the energy performance for the project shall be 100 percent better than the energy performance under the ASHRAE standard or the IECC standards, whichever is more stringent, and the building, structure, or facility shall consume zero net energy.

(5) Subsection (4) does not apply to the gross square footage of enclosed space of any building, structure, or facility that is dedicated for laboratory usage if the ventilation requirements for the area of the building, structure, or facility dedicated for laboratory purposes do not permit compliance with sub. (4) in that area.

that gross square footage

the department shall

(6) Annually no later than March 31, report to the governor and the building commission concerning the percentage level of adherence as of the preceding December 31 to each of the requirements under s. 13.48 (2) (jm) and this section that become effective on a date following that December 31 and the percentage level of adherence as of the preceding December 31 to the requirement under s. 13.48 (2) (jm)

4.9

INS 15-7:

028

LPS:  
check  
component

→ SECTION 1. 101.28 of the statutes is created to read:

**101.028 Energy performance and environmental design standards for certain public buildings, structures and facilities. (1) In this section:**

(a) "Energy Star standards" means the standards prescribed by the U.S.

Environmental Protection Agency under 42 USC 7403 (g) for energy use in buildings.

means the green building rating system of the U.S. Green Building

(b) "LEED green building rating system" has the meaning given under s.

Cancel designates the leadership in energy and environmental design system or its current equivalent as determined by the department.

(c) "LEED silver level" means the performance level designated as

the silver level under the LEED green building rating system or its current equivalent

(d) "U.S. Green Building Council" means the United States Green Building

Council or any successor organization that is substantially the same organization, as determined by the department.

(2) The department shall prescribe, by rule, standards for energy performance and environmental design in public buildings, structures, and facilities which shall apply to the extent required by law. The standards shall be based upon the following standards or, if they are updated, their current equivalents:

(a) The LEED silver level of energy performance for new building construction.

under ss. 13.48(2) and (15), 16.84(5), 16.856, 66.0902, and 120.24

INS  
4A



(b) Minimum LEED performance requirements for the operation and maintenance of existing buildings. ✓

(c) Energy Star standards. ✓

(d) Energy performance standard 90.1-2007 of the American Society of Heating, Refrigerating, and Air Conditioning Engineers. ✓ ✓

~~(e) Standard 62.1 - 2004 of the American Society of heating, Refrigerating, and Air Conditioning Engineers.~~ ✓

(f) National energy efficiency design standards of the International Energy Conservation Code adopted the the International Code Council - 2006.

(g) The Uniform Plumbing Codes - 2006 promulgated by the International Association of Plumbing and Mechanical Officials. ✓

(i) Indoor air quality guidelines for occupied buildings promulgated by the Sheet Metal and Air Conditioning Contractors' National Association <sup>2nd edition 2007</sup> ✓

(j) The International Plumbing Codes - 2006 fixture and fitting performance requirements promulgated by the International Code Council. ✓

**SECTION 2.** 101.05 (1) and (3) of the statutes are amended to read:

101.05 (1) ~~No Except for codes~~ <sup>rules</sup> promulgated under s. 101.028, no building code adopted by the department under this chapter shall affect buildings located on research or laboratory farms of public universities or other state institutions and used primarily for housing livestock or other agricultural purposes. ←

History: 1971 c. 329; 1983 a. 163; 1983 a. 538 s. 271; 1989 a. 31, 354; 1993 a. 27, 117; 1995 a. 27; 1999 a. 135.

**(3)** ~~No Except for rules~~ promulgated under s. 101.028, no standard, rule, code or regulation of the department under this subchapter applies to construction undertaken by the state for the purpose of renovation of the state capitol building.

History: 1971 c. 329; 1983 a. 163; 1983 a. 538 s. 271; 1989 a. 31, 354; 1993 a. 27, 117; 1995 a. 27; 1999 a. 135.

insert.  
to insert  
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INSERT ANALYSIS RK

Under current law, Commerce is required to promulgate an energy conservation code that sets design requirements for construction and equipment for the purpose of energy conservation in public buildings and places of employment. Commerce must consider incorporating into the energy conservation code, design requirements from the most current national energy efficiency design standards, including the International Energy Conservation Code (IECC) or another energy efficiency code that is generally accepted and used by engineers and the construction industry. Current law requires that Commerce review the code on a regular basis, including whenever there is a revision of the IECC, and update the code accordingly.

This bill requires Commerce to incorporate into the energy conservation code a standard that is based upon a specific standard of the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) ~~instead of basing the code on the~~ standards specified under current law. As with the revision requirements under current law, the bill requires Commerce to update the code whenever the ASHRAE standard is revised.

Current law also requires Commerce to promulgate rules for ventilation systems in public buildings and places of employment. This bill requires Commerce <sup>to</sup> incorporate a specific ASHRAE standard into those rules and to update the rules when the standard is revised.

Under current law, a city, village, town, or county may exercise jurisdiction over the construction of new dwellings by passing an ordinance, provided that the ordinance meets the requirements of the one- and <sup>two-</sup> family dwelling code under current law. This bill provides that such an ordinance may exceed the requirements of that code as they relate to energy conservation ~~in the~~ <sup>in the</sup> construction of new dwellings.

This bill authorizes Commerce to promulgate rules that establish standards for the installation of graywater and rainwater systems and that authorize the reuse of graywater and rainwater within the building <sup>or on the</sup> ~~surrounding property~~ from which the graywater or rainwater was generated. Under the bill, graywater is defined as wastewater generated from the use of a clothes washer, sink, shower, or bathtub.

INSERT 13-19

→ 91 SECTION #. CR; 101.02(23)

- 1 101.02 (23) The department may promulgate rules that establish building and design  
2 requirements for public buildings and places of employment that are based upon  
3 standard 189.1-2009 developed by the American Society of Heating, Refrigerating  
4 and Air-Conditioning Engineers in conjunction with the U.S. Green Building  
5 Council and the Illuminating Engineering Society or that are based upon the current

and eliminates the requirement to use other

the building

1 equivalent of that standard. If the department promulgates rules under this  
2 paragraph, the department shall review the rules whenever a revision of standard  
3 189.1-2009, or its current equivalent, is published. The department shall complete  
4 its review of the rules and submit to the legislature proposed rules changing the  
5 standard no later than 18 months after the date on which the revision of the standard  
6 is published. *requirements*

Subsection

INSERT 13-24

7 SECTION 1. 101.025 (4) (ar) of the statutes is created to read:

8 101.025 (4) (ar) The department shall review the rule<sup>s</sup> promulgated under par.  
9 (ag) whenever a revision of standard 62.1-2007, or its current equivalent, of the  
10 American Society of Heating, Refrigerating and Air Conditioning Engineers, is  
11 published. The department shall complete its review of the rules and submit to the  
12 legislature a proposed rule changing the standard<sup>e rules</sup> no later than 18 months after the  
13 date on which the revision of the standard is published.

INSERT ~~11-11~~ 17-4

14 101 (1) In this section:

15 (a) "Graywater" means wastewater generated from the use of a clothes waster,<sup>washer</sup>  
16 sink, shower, or bathtub.

17 (b) "Graywater system" means a system for the collection and reuse of  
18 graywater.

19 (c) "Rainwater system" means a system for the collection and reuse of  
20 rainwater generated from building roofs.

21 (2) The department shall promulgate rules that establish standards for the  
22 installation of graywater and rainwater systems. The standards shall authorize the

1 reuse of graywater and rainwater within the building or on the surrounding property  
2 from which the graywater or rainwater was generated.

INSERT TO INSERT JK

the buildings

3 (3) The department shall review a rule promulgated under sub. (2) whenever  
4 a revision of a standard on which the rule is based is published. The department  
5 shall complete its review of the rule and submit to the legislature a proposed rule  
6 changing the standard no later than 18 months after the date on which the revision  
7 of the standard is published.

✓

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**LEGISLATIVE REFERENCE BUREAU**

LRB-3485/P6ins2  
JTK.....

INS 4A:

(d) "Minimum LEED performance requirements for the operation and maintenance of existing buildings" means the performance requirements so designated under the LEED green building rating system, as prescribed by the U.S. Green Building Council or its current equivalent as determined by the department.

**Kuesel, Jeffery**

---

**From:** Shovers, Marc  
**Sent:** Friday, February 05, 2010 3:19 PM  
**To:** Kuesel, Jeffery  
**Cc:** Kite, Robin  
**Subject:** FW: Need clarification on bill

Jeff, I think this should have been sent to you.

Marc

---

**From:** Sherrie Gruder [mailto:gruder@epd.engr.wisc.edu]  
**Sent:** Friday, February 05, 2010 1:31 PM  
**To:** Rep.Molepske; Van de Bogert, Abigail; Shovers, Marc  
**Cc:** 'Sherrie Gruder'; Farnsworth, Kathy  
**Subject:** RE: Need clarification on bill

Rep Molepske et al,  
at our last meeting there was an assignment to me that I answer below. I have not seen the next draft as yet. Please note that I will be out of the office Feb 8-12 and not checking email.

**High Performance Green Building**

Suggested additional approach for page 6, 13.48 3. to address what happens once the upgrades to 15 percent of GSF of existing building is reached by 2015. Of course, please put it in the appropriate drafting language:

Review and assess further high performance upgrades to existing buildings whereby DOA shall establish new incremental targets and dates through 2030 to continue progress.

I look forward to seeing the bill.  
Sherrie

---

Sherrie Gruder, LEED Accredited Professional  
Sustainable Design Specialist, Distinguished Lecturer  
Energy Program Coordinator  
UW-Extension Solid & Hazardous Waste Education Center  
610 Langdon St., Rm 322  
Madison, WI 53703  
Phone: 608 262-0398; Fax: 608 262-6250  
email: [gruder@engr.wisc.edu](mailto:gruder@engr.wisc.edu)  
[www.shwec.uwm.edu](http://www.shwec.uwm.edu)  
[www.focusonenergy.com](http://www.focusonenergy.com)  
An MPowering Madison Partner. Take the pledge by visiting [www.MpoweringMadison.com](http://www.MpoweringMadison.com)

**From:** Rep.Molepske [mailto:Rep.Molepske@legis.wisconsin.gov]  
**Sent:** Monday, January 18, 2010 9:27 AM  
**To:** Sherrie Gruder; Van de Bogert, Abigail; Shovers, Marc  
**Cc:** Rep.Molepske; Sherrie Gruder  
**Subject:** RE: Need clarification on bill

Hello Sherrie, Abby and Marc:

I appreciate all of the hard work so far on this bill; I look forward to introducing it soon.

Thank you very much Marc for your drafting and attention to detail; Sherry and Abby will be my first contact on the language.

Thank you all!

Louis Molepske Jr.

-----Original Message-----

**From:** Sherrie Gruder [mailto:gruder@epd.engr.wisc.edu]  
**Sent:** Friday, January 15, 2010 6:04 PM  
**To:** Van de Bogert, Abigail; Shovers, Marc  
**Cc:** Rep.Molepske; 'Sherrie Gruder'  
**Subject:** RE: Need clarification on bill

Abby and Marc,

As per your requests on the High Performance Green Building Bill:

further explanation of the directions on page 13.

As currently drafted, the 2030 challenge- zero net energy by 2030 and benchmarks to achieve that, which is what is reflected in 2a-e, is required for municipalities only. Rep. Molepske would like this to be a requirement for state buildings. Therefore, it needs to be inserted in the part of the bill directing state buildings new construction and remodels of 50% or more.

It should be redrafted as a goal rather than as a mandate for political subdivision facilities. Further, it should be added as a goal for schools as well.

On the left margin, I provided a reference to that language in AB 649, pg 146, s 299.03 (3) where it is simply stated as a goal. In addition, on page 7 bottom, I reference EO 13514- 2009 which is President Obama's EO that also adopts ZNE by 2030. That language might be helpful in the drafting as well.

The **definition of zero net energy (ZNE)** is provided to add to the definitions section and should replace the words carbon neutral (they are not the same thing). We decided we could measure and achieve a ZNE goal but not a carbon neutral goal which is beyond the building.

To answer the Note on page 13: a project begins with the issuance of the RFP- request for proposals- to A/E firms to apply for designing and building the project. The language in the RFP must reflect the zero net energy mandate or goal, depending who is the owner of the building. The RFP would state that the project will be designed for minimum LEED certification at the silver level and must meet the following WI benchmarks: 30% below ASHRAE 90.1 2007 or current version, 30% below the water use baseline in the then current version of LEED, 75% construction /demolition materials recycling and reuse. Then it would include the zne level of energy and carbon performance depending on the year. But the inclusion of these specifications would occur in an RFP as a matter of course once it is law. I don't know that the bill needs to state this. It is your call.

pg 12. The LEED checklist is available on line and may be reproduced. However, anything further, such as the application guide must be purchased from USGBC, so copying it would a copyright issue. That is what the note is about.



The language referring to LEED, ASHRAE and SMACNA all as standards pg 12 line 4 is technically incorrect because LEED is a Rating System and SMACNA a guideline while ASHRAE is a standard. If that is not an issue in bill language, then disregard. Otherwise, please change the language to better clarify. The department shall maintain a current copy of the The Leadership in Energy and Environmental Design (LEED) Green Building Rating System for New Construction and Major Renovations and LEED-Existing Buildings: Operations and Maintenance, the standards referenced in s. 13.48..., and the guideline referenced in...

Three other areas that require **substantive change**:

- 1) omit the word "**office**" before buildings for all state projects built or leased. This bill is for conditioned space (space that is heated and air conditioned). That includes many other building types owned by WI in addition to offices such as labs, classrooms, nature centers, etc.
- 2) All references to **purchase** of recycled materials. It was never the intent to incorporate a target here as part of WI benchmarks. Pg 5 c. The 75% is for construction demo materials reuse and recycling NOT purchase of recycled products. That must be omitted. Language might read:
  - a. That at least 75 percent of the demolition and construction materials for any demolition/construction project are required to be reused or recycled on site or transferred to a 3<sup>rd</sup> party for reuse and recycling.
- 3) **Energy Star**- pgs 3 and 4: incorporate a threshold in this section top of page 4 end of line 3 as indicated in writing and again at the end of that paragraph after the final sentence that now ends "conform to Energy Star standard". It's one thing to measure and disclose the energy use intensity. The other is that the state will only approve any lease on properties "**...that conform to Energy Star Standards at a minimum threshold in compliance with the current version of LEED-EB: O&M.**" (The current LEED threshold is an Energy Star rating of 69 out of 100. An EPA Energy Star rating is achieved at a 75 which indicates that the building energy performance ranks in the top quarter for similar building types in the region. This bill will use the LEED number.)

#### **Clarifications:**

Pg 4 a line 12 That the project meets the performance requirements of the most current version of USGBC's LEED Green Building Rating System at the silver level

on pg 5:

e. Line 18 insert after at a minimum with "IAQ Guidelines for Occupied Buildings Under Construction, second edition 2007 or later" by the Sheet Metal...

f. line 21 insert "interior after level of

line 22 insert water use baseline "established in the current version of LEED 2009 or later" as determined....

#### **Additions:**

pg 17 to Graywater systems. Rep Molepske would like to add rainwater as a permitted interior use. I will have to devise draft language to send to you on that one as rainwater is not graywater.

There is one addition on a subject where no language was drafted: add language creating a reporting requirement for DOA to the Building Commission and the Governor annually as per EO 145 on the progress toward achieving the certification of 15% of the gross square footage of existing buildings with LEED EB-O&M, status of leases that are Energy Star compliant, and all other requirements in the bill.

I believe the rest of the changes are straight forward.

But if you have any questions or trouble reading them, please feel free to contact me to clarify as needed.

Sherrie

---

Sherrie Gruder, LEED Accredited Professional  
Sustainable Design Specialist, Distinguished Lecturer  
Energy Program Coordinator  
UW-Extension Solid & Hazardous Waste Education Center  
610 Langdon St., Rm 322  
Madison, WI 53703  
Phone: 608 262-0398; Fax: 608 262-6250  
email: [gruder@engr.wisc.edu](mailto:gruder@engr.wisc.edu)  
[www.shwec.uwm.edu](http://www.shwec.uwm.edu)  
[www.focusonenergy.com](http://www.focusonenergy.com)  
An MPowering Madison Partner. Take the pledge by visiting [www.MpoweringMadison.com](http://www.MpoweringMadison.com)

**From:** Van de Bogert, Abigail [mailto:[Abigail.VandeBogert@legis.wisconsin.gov](mailto:Abigail.VandeBogert@legis.wisconsin.gov)]

**Sent:** Friday, January 15, 2010 1:24 PM

**To:** Sherrie Gruder

**Subject:** Need clarification on LEED bill

Hi Sherrie,

Marc Shovers had some questions on the comments you made on the LEED bill--page 13 in particular. I've typed up the comments as best as I can below. Could you please let me know (a) if I typed the comments correctly, and if not, what should be changed and (b) what specific actions you would like the drafters to take with respect to these comments. I have copied Marc's email below.

Page 13, right hand side: "Change to goal for municipalities and schools. Require for state buildings."

Page 13, left hand side: "2030 challenge applies to all-not just minicipal. AB649 pg 146 ZNE goal by 2030 (for res. comm.) S 299.03 GHG emissions goals (3) new building energy use goal"

Page 13, lines 19-20: "Zero net energy. ZNE building on an annual basis produces as much energy for electricity, heating & cooling from renewable sources as it consumes."

Thank you!

Abby

---

**From:** Shovers, Marc

**Sent:** Friday, January 15, 2010 11:21 AM

**To:** Van de Bogert, Abigail

**Subject:** RE: LRB-3485 revisions from Rep. Molepske

Hi Abby:

02/06/2010

I drafted s. 66.0902 in the bill, which is on pages 12 and 13. Someone wrote in comments on page 13, but I can't read them very well, and I don't really understand what is wanted. Could you please have the author translate and explain precisely what changes are being requested? Thanks.

Marc

Marc E. Shovers

Managing Attorney  
Legislative Reference Bureau  
Phone: (608-266-0129)  
E-Mail: marc.shovers@legis.wisconsin.gov

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**From:** Van de Bogert, Abigail  
**Sent:** Friday, January 15, 2010 9:44 AM  
**To:** Kite, Robin; Kuesel, Jeffery; Shovers, Marc  
**Subject:** LRB-3485 revisions from Rep. Molepske

Hello Jeff, Marc, and Robin,

First, thank you very much for your work on LRB-3485. We are really excited about it and hoping to have it finished in time to get it introduced in the next few weeks. Rep. Molepske and Sherrie Gruder have made some edits to the bill. These edits are hand-written, and I have scanned the document and attached it to this email. Please don't hesitate to contact me if you have any questions about the proposed edits.

I realize that we are approaching a very busy time of year for you, but nonetheless I have to ask if you think it would be possible for these edits to be done within a week. Rep. Molepske is very eager to get this bill on its way. Could you please let me know if you think such a timeline is feasible?

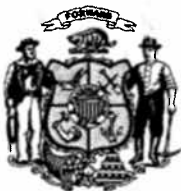
In addition, Rep. Molepske would like to set up a meeting with all of you, John Stolzenburg, David Lovell, and Sherrie Gruder to finalize any revisions next week. He has suggested the following dates and times:

Wednesday, 1/20 at 9:00 am, 9:30 am, or after 3:00 pm.  
Thursday, 1/21 in the late afternoon  
Friday 1/22 after 10:30 am.

If you are available for a meeting on any of these days or times, please let me know which ones. Again, I realize next week will be busy for you and I know Rep. Molepske really appreciates your work on this project. Thank you.

Abby Van de Bogert

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State of Wisconsin  
2009 - 2010 LEGISLATURE

LRB-3485/P8 7

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PRELIMINARY DRAFT - NOT READY FOR INTRODUCTION

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1 AN ACT *to renumber and amend* 13.48 (15) and 101.025 (4) (intro.); *to amend*  
2 16.84 (5), 101.027 (2), 101.027 (3) (a) 1., 101.027 (3) (b) 1., 101.05 (1) and (3),  
3 101.65 (1) (a) (intro.) and 119.04 (1); and *to create* 13.48 (2) (jm), 13.48 (15) (b),  
4 16.85 (3m), 16.856, 20.255 (2) (ed), 66.0902, 101.02 (23), 101.025 (4) (ar),  
5 101.028, 120.24 and 145.133 of the statutes; **relating to:** energy conservation  
6 standards for the construction of certain buildings, energy and environmental  
7 design standards for state buildings, structures, and facilities, energy and  
8 environmental design standards for school district facilities and other local  
9 government buildings, leasing of state buildings, structures, and facilities,  
10 standards for the construction and use of graywater systems, *and* granting  
11 rule-making authority ~~and making an appropriation.~~

***Analysis by the Legislative Reference Bureau***

This analysis is not complete. A complete analysis will be provided in a later version.

Currently, with certain exceptions, the Department of Administration (DOA) must ensure that the specifications for each state construction project require the use

of recovered and recycled materials to the extent that such use is technically and economically feasible. With certain exceptions, DOA must also prescribe and enforce energy efficiency standards for energy consuming equipment that is installed in connection with state construction projects. The standards must meet or exceed specified statutory standards. The Building Commission must also apply these standards when entering into certain leases on behalf of the state. Current law also requires the commission to employ a design for cogeneration of steam and electricity in state-owned central steam generating facilities unless the commission determines that such a design is not cost-effective and technically feasible. Currently, the commission must also ensure that state-operated steam generating facilities are designed to allow the use of biomass fuels and refuse-derived fuels to the greatest extent cost-effective and technically feasible. In addition, under current law, the commission is prohibited from approving the construction or major remodeling of or addition to any state building or structure unless the building or structure makes maximum practical use of passive solar energy system design elements and, unless not technically or economically feasible, incorporates an active solar energy system or photovoltaic solar energy system or other renewable energy system.

This bill directs DOA and the Building Commission to ensure that the plans and specifications for each major state construction project (each project for the construction of any new state building, structure, or facility containing at least 10,000 gross square feet of conditioned space, or for the repair, renewal, renovation, or expansion of any existing building, structure, or facility for occupancy by any state entity if the building, structure, or facility contains at least 10,000 gross square feet of conditioned space and the project affects more than 50 percent of the existing gross square feet of conditioned space in the building, structure, or facility) conform at a minimum to the requirements under the LEED green building rating system at the silver performance level, as prescribed by the Department of Commerce (Commerce) based upon the standards of the U.S. Green Building Council. The bill also directs DOA and the Building Commission to ensure that each such building, structure, or facility conforms to specific standards specified by Commerce that are derived from various national and international building codes for energy performance, reuse of demolition materials, ventilation components, indoor air quality performance, and water usage level. The bill also directs the commission to enforce compliance with the bill's requirements with respect to all major construction projects whenever the buildings, structures, or facilities being constructed are purchased by the state under a purchase agreement or whenever construction, repair, renewal, renovation, or expansion of a building, structure, or facility is performed for the state under a lease agreement with option to purchase.

The bill also directs the Building Commission to apply all moneys available for its use under the Authorized State Building Program to achieve certification as of January 1, 2015, by the U.S. Green Building Council for not less than 15 percent of the gross square footage of conditioned space owned or leased by state agencies, as determined by DOA, ~~for~~ meeting ~~the~~ LEED ~~standards~~ for existing buildings ~~operation and maintenance minimum performance requirements~~.

minimum energy performance requirements

the operation and maintenance of

(49)

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2A

Currently, DOA has responsibility for the negotiation and administration of leases of real property by this state, except as otherwise provided by law. The Building Commission has authority to approve leases of real property by the state, except as otherwise provided by law. This bill directs DOA, before entering into any lease, or renewing or extending any lease, for improved real property to be used by a state agency, to require the prospective lessor to disclose the energy use intensity for the total property and the annual energy usage for the total property, calculated in accordance with Energy Star standards, as determined by Commerce, and to verify and forward that information to the Building Commission. The bill directs DOA to require other state agencies that have authority to enter into leases for improved real property to obtain and forward the same information to the Building Commission before entering into, or renewing or extending, any lease for real property. The bill then prohibits the Building Commission from approving any lease for improved real property to be used by this state unless DOA certifies to the commission that the energy use intensity for the total property and the annual energy usage for the total property conform to Energy Star standards at a level sufficient to meet the minimum threshold for compliance with the LEED green building rating system for existing buildings-operation and maintenance performance requirements, as determined by Commerce. The bill directs the Building Commission to require other state agencies that have authority to enter into leases for improved real property, to certify to the commission, before entering into, or renewing or extending, any lease for real property to be used by this state, that the energy use intensity for the total property and the annual energy usage for the total property conform to the same standards.

The bill also requires DOA, with limited exceptions, to ensure that major state buildings, structures, and facilities that are constructed by or for the state conform to specified energy performance standards at increasingly stringent levels by specified dates beginning on the first day of the 7th month beginning after the day the act resulting from the bill becomes law and ending on January 1, 2030, by which date all major state buildings, structures, and facilities that are constructed by or for the state must achieve a zero net energy level of energy performance. In addition, the bill directs DOA to report annually to the governor and the Building Commission concerning the percentage level of adherence to the requirements imposed upon DOA under the bill that become effective on a date later than the end of the preceding year and the percentage level of adherence to the requirement imposed upon the Building Commission to apply all moneys available to the commission to achieve certification for at least 15 percent of conditioned space in existing owned or leased state buildings, structures, or facilities as meeting the LEED energy performance standards specified in the bill.

Under current law, Commerce is required to promulgate an energy conservation code that sets design requirements for construction and equipment for the purpose of energy conservation in public buildings and places of employment. Commerce must consider incorporating into the energy conservation code design requirements from the most current national energy efficiency design standards, including the International Energy Conservation Code (IECC) or another energy

efficiency code that is generally accepted and used by engineers and the construction industry. Current law requires that Commerce review the code on a regular basis, including whenever there is a revision of the IECC, and update the code accordingly.

This bill requires Commerce to incorporate into the energy conservation code a standard that is based upon a specific standard of the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) and eliminates the requirement to use other standards specified under current law. As with the revision requirements under current law, the bill requires Commerce to update the code whenever the ASHRAE standard is revised.

Current law also requires Commerce to promulgate rules for ventilation systems in public buildings and places of employment. This bill requires Commerce to incorporate a specific ASHRAE standard into those rules and to update the rules when the standard is revised.

Under current law, a city, village, town, or county may exercise jurisdiction over the construction of new dwellings by passing an ordinance, provided that the ordinance meets the requirements of the one- and two-family dwelling code under current law, this bill provides that such an ordinance may exceed the requirements of that code as they relate to energy conservation in the construction of new dwellings.

This bill authorizes Commerce to promulgate rules that establish standards for the installation of graywater and rainwater systems and that authorize the reuse of graywater and rainwater within the building, or on the property surrounding the building, from which the graywater or rainwater was generated. Under the bill, graywater is defined as wastewater generated from the use of a clothes washer, sink, shower, or bathtub.

For further information see the *state and local* fiscal estimate, which will be printed as an appendix to this bill.

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***The people of the state of Wisconsin, represented in senate and assembly, do enact as follows:***

1           **SECTION 1.** 13.48 (2) (jm) of the statutes is created to read:

2           13.48 (2) (jm) 1. In this paragraph, "conditioned space" means space that is  
3           designed to have controlled environmental conditions.

4           2. The building commission shall not approve the design or construction of any  
5           project for the construction of any building, structure, or facility for a board, agency,  
6           officer, department, commission, or body corporate, if the building, structure, or  
7           facility after construction will contain at least 10,000 gross square feet of conditioned



1 space for occupancy by any such entity, or of any project for the repair, renewal,  
2 renovation, or expansion of any existing building, structure, or facility for occupancy  
3 by any such entity if the building, structure, or facility contains at least 10,000 gross  
4 square feet of conditioned space and the project affects more than 50 percent of the  
5 existing gross square feet of conditioned space in the building, structure, or facility,  
6 regardless of the funding source of the project, unless the department of  
7 administration verifies and certifies to the commission, after reviewing the plans  
8 and specifications, all of the following:

9 a. That the energy performance for the project conforms at a minimum to the  
10 requirements under the LEED green building rating system at the silver level, as  
11 defined in s. 16.856 (1) (f), for construction projects.

12 b. That the energy performance for the project is at least 30 percent better than  
13 the performance standard prescribed by the department of commerce under s.  
14 101.028 based upon standard 90.1-2007 of the American Society of Heating,  
15 Refrigerating and Air Conditioning Engineers or its most current equivalent, as  
16 documented by energy modeling and certified in writing by the chief engineer for the  
17 project.

18 c. That at least 75 percent of the demolition materials from any demolition  
19 required to undertake the project are reused in the project or transferred to a 3rd  
20 party for reuse as a part of another construction project for an agency, as defined in  
21 s. 16.70 (1e), or a local governmental unit, as defined in s. 19.42 (7u).

22 d. That the ventilation components for the project are strictly in conformity  
23 with standards prescribed by the department of commerce under s. 101.028 based  
24 upon standard 62.1-2004 of the American Society of Heating, Refrigerating, and Air

1 Conditioning Engineers, and the chief engineer for the project certifies in writing  
2 that no exemptions from strict conformity with that standard have been authorized.

3 e. That the project has an indoor air quality management plan that addresses  
4 adherence to the heating, ventilation, and air conditioning performance standards  
5 for the project, source control that ensures use of low emission materials and  
6 finishes, pathway interruption to prevent migration of contaminants during the  
7 construction process, housekeeping procedures to prevent the spread and growth of  
8 contaminants during the construction process, and construction activity scheduling  
9 to prevent cross contamination of materials used in the project during the  
10 construction process. The plan shall be consistent at a minimum with standards  
11 promulgated by the department of commerce under s. 101.028 based upon indoor air  
12 quality guidelines for occupied building of the Sheet Metal and Air Conditioning  
13 Contractors' National Association, 2nd edition, 2007.

14 f. That the project upon completion will attain a level of interior water use no  
15 greater than 30 percent below the interior water use baseline, as determined by the  
16 department of administration in accordance with the LEED green building rating  
17 system, as defined in s. 16.856 (1) (e) assuming that 100 percent of the indoor  
18 plumbing fixtures used in the project are in compliance with standards promulgated  
19 by the department of commerce under s. 101.028 based upon the strictest applicable  
20 standard under the Uniform Plumbing Codes-2006 promulgated by the  
21 International Association of Plumbing and Mechanical Officials or the International  
22 Plumbing Codes-2006 fixture and fitting performance requirements promulgated  
23 by the International Code Council.

24 3. The building commission shall not enter into an agreement for the purchase  
25 of or for the lease of, or renewal of a lease of, with option to purchase, any building,

1 structure, or facility that is constructed or to be constructed for occupancy by any  
2 board, agency, officer, department, commission, or body corporate, if the building,  
3 structure, or facility after construction will contain at least 10,000 gross square feet  
4 of conditioned space for occupancy by any such entity, or any building, structure, or  
5 facility that is to be repaired, renewed, renovated, or expanded for occupancy by any  
6 such entity if the building, structure, or facility contains at least 10,000 gross square  
7 feet of conditioned space and the repair, renewal, renovation, or expansion affects  
8 more than 50 percent of the existing gross square feet of conditioned space in the  
9 building, structure, or facility, regardless of the funding source of the agreement,  
10 unless the department of administration verifies and certifies that the building,  
11 structure, or facility conforms or will after construction, repair, renewal, renovation  
12 or expansion conform to all of the standards specified in subd. 2.

13 4. The building commission shall apply all moneys available for its use under X  
14 the authorized state building program to achieve certification as of January 1, 2015,  
15 by the U.S. Green Building Council for not less than 15 percent of the total gross  
16 square footage of conditioned space in buildings, structures, and facilities that are  
17 owned or leased by agencies on that date, as determined by the department of  
18 administration under s. 16.856 (3), for meeting the minimum LEED performance  
19 requirements for the operation and maintenance of existing buildings, as defined in  
20 s. 16.856 (1) (h).

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7-20  
21 **SECTION 2.** 13.48 (15) of the statutes is renumbered 13.48 (15) (a) and amended  
22 to read:

23 13.48 **(15)** (a) Subject to the requirements of par. (b) and s. 20.924 (1) (i), the  
24 building commission shall have the authority to acquire leasehold interests in land  
25 and buildings where such authority is not otherwise provided to an agency by law.

1           **SECTION 3.** 13.48 (15) (b) of the statutes is created to read:

2           13.48 (15) (b) The building commission shall not approve the leasing of, or the  
3           renewal or extension of any lease for, property for use by this state unless the  
4           department of administration has certified to the commission that the energy use  
5           intensity for the total property and the annual energy usage for the total property  
6           conform to standards promulgated by the department of commerce under s. 101.028  
7           based upon Energy Star standards consistent with the minimum LEED performance  
8           requirements for the operation and maintenance of existing buildings. The  
9           commission shall also require other agencies, as defined in s. 16.70 (1e), that have  
10          authority to lease improved real property, to certify to the commission, before  
11          entering into, or renewing or extending, any lease of real property, that the energy  
12          use intensity for the total property and the annual energy usage for the total property  
13          conform to the same standards.

14          **SECTION 4.** 16.84 (5) of the statutes is amended to read:

15          16.84 (5) Have responsibility, subject to approval of the governor, for all  
16          functions relating to the leasing, acquisition, allocation and utilization of all real  
17          property by the state, except where such responsibility is otherwise provided by the  
18          statutes. In this connection, the Prior to entering into any lease, or renewing or  
19          extending any lease, for property to be used by this state, the department shall  
20          require the prospective lessor to disclose the energy use intensity for the total  
21          property, measured on a square foot basis, and the annual energy usage for the total  
22          property, calculated in accordance with standards promulgated by the department  
23          of commerce under s. 101.028 based upon Energy Star standards, as defined in s.  
24          13.48 (15) (b), consistent with the minimum LEED performance requirements for the  
25          operation and maintenance of existing buildings, as defined in s. 16.856 (1) (h). The

1 department shall verify and certify this information to the building commission  
2 before the commission considers approval of the lease, or the renewal or extension  
3 of the lease. The department shall also require other agencies, as defined in s. 16.70  
4 (1e), that have authority to enter into leases for real property to obtain, verify, and  
5 certify the same information to the commission before entering into any lease, or  
6 renewing or extending any lease, for property to be used by those agencies. The  
7 department shall, with the governor's approval, require physical consolidation of  
8 office space utilized by any executive branch agency having fewer than 50 authorized  
9 full-time equivalent positions with office space utilized by another executive branch  
10 agency, whenever feasible. The department shall lease or acquire office space for  
11 legislative offices or legislative service agencies at the direction of the joint  
12 committee on legislative organization. In this subsection, "executive branch agency"  
13 has the meaning given in s. 16.70 (4).

14 **SECTION 5.** 16.85 (3m) of the statutes is created to read:

15 16.85 (3m) To appoint or approve the appointment of a chief engineer for each  
16 major construction project, as defined in s. 16.856 (1) (g).

17 **SECTION 6.** 16.856 of the statutes is created to read:

18 **16.856 Energy and environmental design standards for certain state**  
19 **buildings, structures, and facilities. (1)** In this section:

20 (a) "Agency" has the meaning given in s. 16.70 (1e).

21 (b) "ASHRAE standard" means the standard promulgated by the department  
22 of commerce under s. 101.028 based upon standard 90.1-2007 of the American  
23 Society of Heating, Refrigerating and Air Conditioning Engineers or its current  
24 equivalent as determined by the department of commerce under s. 101.028.

1 (c) "Conditioned space" means space that is designed to have controlled  
2 environmental conditions.

3 (d) "IECC standards" means the energy efficiency design standards  
4 promulgated by the department of commerce under s. 101.028 based upon the  
5 national energy efficiency design standards of the International Energy  
6 Conservation Code or their current equivalents as determined by the department of  
7 commerce under s. 101.028.

8 (e) "LEED green building rating system" means the green building rating  
9 system of the U.S. Green Building Council designated as the leadership in energy  
10 and environmental design system or its current equivalent as determined by the  
11 department of commerce under s. 101.028.

12 (f) "LEED silver level" means the performance level designated as the silver  
13 level under the LEED green building rating system or its current equivalent as  
14 determined by the department of commerce under s. 101.028.

15 (g) "Major construction project" means a project for the construction of a state  
16 building, structure, or facility that will, upon completion, contain at least 10,000  
17 gross square feet of conditioned space or for the repair, renewal, renovation, or  
18 expansion of an existing state building, structure, or facility containing at least  
19 10,000 gross square feet of conditioned space that affects more than 50 percent of the  
20 existing gross square feet of conditioned space in that building, structure, or facility.

21 (h) "Minimum LEED performance requirements for the operation and  
22 maintenance of existing buildings" means the performance requirements so  
23 designated under the LEED green building rating system, as prescribed by the U.S.  
24 Green Building Council, or its current equivalent as determined by the department  
25 of commerce under s. 101.028.

1 (i) "Zero net energy" means an energy consumption level under which a  
2 building, structure, or facility produces as much energy for electricity, heating, and  
3 cooling from renewable sources in any calendar year as the building, structure, or  
4 facility consumes during the same period.

5 (2) The department shall ensure that the plans and specifications for each  
6 major construction project conform at a minimum to the requirements for  
7 certification at the LEED silver level. The department shall also ensure that the  
8 energy performance, use and disposal of construction materials, ventilation  
9 components, indoor air quality performance, and water usage level for each major  
10 construction project conform to the standards specified s. 13.48 (2) (jm) 2.

11 (3) The department shall maintain a current inventory of the location and  
12 gross square footage of the conditioned space in all buildings, structures, and  
13 facilities that are owned or leased by any agency for its use or the use of another  
14 agency. The inventory shall include for each building, structure, or facility  
15 information concerning the conditioned space in the building, structure, or facility  
16 and whether the building, structure, or facility or any portion thereof is certified or  
17 eligible for certification by the U.S. Green Building Council as meeting the minimum  
18 LEED performance requirements for the operation and maintenance of existing  
19 buildings.

20 (4) Except as provided in sub. (5), the department shall ensure that each  
21 ~~building, structure, or facility that is constructed by or for the state and designated~~  
22 ~~as a major construction project conforms to whichever of the following energy~~  
23 ~~performance standards applies, based upon the year in which construction of the~~  
24 building, structure, or facility begins:

*Handwritten notes:*  
- Above line 21: repair, renew, renovate or expanded  
- Above line 22: that is  
- Above line 23: repair, renew, renovation or expansion

## SECTION 6

↑ repair ↑ renewal ↑ renovation, or expansion

1 (a) For a building, structure, or facility the construction of which begins on or  
2 after the first day of the 7th month beginning after the effective date of this  
3 paragraph .... [LRB inserts date], but before January 1, 2015, the energy  
4 performance shall be at least 30 percent better than the energy performance under  
5 the ASHRAE standard or the IECC standards, whichever is the most stringent.

↑ repair ↑ renewal ↑ renovation, or expansion

6 (b) For a building, structure, or facility the construction of which begins after  
7 December 31, 2014, but before January 1, 2020, the energy performance shall be at  
8 least 70 percent better than the performance under the ASHRAE standard or the  
9 IECC standards, whichever is the most stringent.

↑ repair ↑ renewal ↑ renovation, or expansion

10 (c) For a building, structure, or facility the construction of which begins after  
11 December 31, 2019, but before January 1, 2025, the energy performance shall be at  
12 least 80 percent better than the energy performance under the ASHRAE standard  
13 or the IECC standards, whichever is the most stringent.

↑ repair ↑ renewal ↑ renovation, or expansion

14 (d) For a building, structure, or facility the construction of which begins after  
15 December 31, 2024, but before January 1, 2030, the energy performance shall be at  
16 least 90 percent better than the energy performance under the ASHRAE standard  
17 or the IECC standards, whichever is the most stringent.

↑ repair ↑ renewal ↑ renovation, or expansion

18 (e) For a building, structure, or facility the construction of which begins after  
19 December 31, 2029, the energy performance shall be 100 percent better than the  
20 energy performance under the ASHRAE standard or the IECC standards, whichever  
21 is more stringent, and the building, structure, or facility shall consume zero net  
22 energy.

23 (5) Subsection (4) does not apply to the gross square footage of enclosed space  
24 of any building, structure, or facility that is dedicated for laboratory usage if the



ventilation requirements for that gross square footage do not permit compliance with sub. (4) in that area.

*7w5  
13-2*  
(7)(6) Annually no later than March 31, the department shall report to the governor and the building commission concerning the percentage level of adherence as of the preceding December 31 to each of the requirements under s. 13.48 (2) (jm) and this section that become effective on a date following that December 31 and the percentage level of adherence as of the preceding December 31 to the applicable requirement under s. 13.48 (2) (jm) 4. for S.

**SECTION 7.** 20.255 (2) (ed) of the statutes is created to read:  
20.255 (2) (ed) LEED fees. A sum sufficient to pay LEED registration and certification fees on behalf of school districts under s. 120.24.

**SECTION 8.** 66.0902 of the statutes is created to read:

**66.0902 Energy and environmental design standards for political subdivision facilities.** (1) In this section:

(a) "ASHRAE standards" *has the meaning given in s. 16.856(1)(b)*  
means standard 90.1-2007 of the American Society  
of Heating, Refrigerating and Air Conditioning Engineers. (e)  
(b) "IECC standards" *has the meaning given in s. 16.856(1)(d)*  
means the most current national energy efficiency design  
standards of the International Energy Conservation Code. (f)

(d) "Major construction project" means a project for the construction of a public building by or for a political subdivision that will, upon completion of the project, contain at least 10,000 gross square feet of enclosed office space or for the repair, renewal, renovation, or expansion of an existing public building by or for a political subdivision containing at least 10,000 gross square feet of enclosed office space that affects more than 50 percent of the existing gross square feet of enclosed office space in that building.

*has the meaning given in s. 16.856(1)(e)*  
(e) "LEED green building rating system" *has the meaning given in s. 16.856(1)(e)*  
(f) "LEED silver level" *has the meaning given in s. 16.856(1)(f)*

For purposes of this section, a major construction project begins with the issuance of a request for proposal by the political subdivision.

SECTION 8

"Political subdivision" means any city, village, town, or county.

(2) A political subdivision shall ensure that a major construction project meets

one of the ~~ASHRAE~~ standards, based on the year in which the project begins

(3) (a) For a project that begins on or after the first day of the 7th month after the effective date of this paragraph .... [LRB inserts date], but before January 1, 2015,

the energy performance for the project shall be at least 30 percent better than the performance under the ASHRAE standards ~~and~~ <sup>or</sup> the IECC standards.

~~NOTE: Who or what determines when a project "begins"?~~

(b) For a project that begins after December 31, 2014, but before January 1, 2020, the energy performance for the project shall be at least 70 percent better than the performance under the ASHRAE standards ~~and~~ <sup>or</sup> the IECC standards.

(c) For a project that begins after December 31, 2019, but before January 1, 2025, the energy performance for the project shall be at least 80 percent better than the performance under the ASHRAE standards ~~and~~ <sup>or</sup> the IECC standards.

(d) For a project that begins after December 31, 2024, but before January 1, 2030, the energy performance for the project shall be at least 90 percent better than the performance under the ASHRAE standards ~~and~~ <sup>or</sup> the IECC standards.

(e) For a project that begins after December 31, 2029, the energy performance for the project shall be ~~at~~ <sup>at least</sup> 100 percent better than the performance under the ASHRAE standards ~~and~~ <sup>or</sup> the IECC standards, ~~such that the energy performance of the project is carbon neutral~~ <sup>whichever is more stringent, and</sup> shall consume zero net energy.

SECTION 9. 101.02 (23) of the statutes is created to read:

101.02 (23) The department may promulgate rules that establish building and design requirements for public buildings and places of employment that are based upon standard 189.1-2009 developed by the American Society of Heating,

1 Refrigerating and Air-Conditioning Engineers in conjunction with the U.S. Green  
2 Building Council and the Illuminating Engineering Society or that are based upon  
3 the current equivalent of that standard. If the department promulgates rules under  
4 this subsection, the department shall review the rules whenever a revision of  
5 standard 189.1-2009, or its current equivalent, is published. The department shall  
6 complete its review of the rules and submit to the legislature proposed rules  
7 changing the requirements no later than 18 months after the date on which the  
8 revision of the standard is published.

9 **SECTION 10.** 101.025 (4) (intro.) of the statutes is renumbered 101.025 (4) (ag),  
10 and 101.025 (4) (ag) (intro.), as renumbered, is amended to read:

11 101.025 (4) (ag) (intro.) For ventilation systems in public buildings and places  
12 of employment, the department shall ~~adopt~~ promulgate rules ~~setting that~~  
13 incorporate standard 62.1-2007, or its current equivalent, of the American Society  
14 of Heating, Refrigerating and Air Conditioning Engineers and that set all of the  
15 following:

16 **SECTION 11.** 101.025 (4) (ar) of the statutes is created to read:

17 101.025 (4) (ar) The department shall review the rules promulgated under par.  
18 (ag) whenever a revision of standard 62.1-2007, or its current equivalent, of the  
19 American Society of Heating, Refrigerating and Air Conditioning Engineers, is  
20 published. The department shall complete its review of the rules and submit to the  
21 legislature a proposed rule changing the rules no later than 18 months after the date  
22 on which the revision of the standard is published.

23 **SECTION 12.** 101.027 (2) of the statutes is amended to read:

24 101.027 (2) The department shall review the energy conservation code and  
25 shall promulgate rules that change the requirements of the energy conservation code

1 to improve energy conservation. No rule may be promulgated that has not taken into  
2 account the cost of the energy conservation code requirement, as changed by the rule,  
3 in relationship to the benefits derived from that requirement, including the  
4 reasonably foreseeable economic and environmental benefits to the state from any  
5 reduction in the use of imported fossil fuel. The proposed rules changing the energy  
6 conservation code shall be submitted to the legislature in the manner provided under  
7 s. 227.19. In conducting a review under this subsection, the department shall  
8 ~~consider incorporating~~ incorporate, into the energy conservation code, design  
9 ~~requirements from standard 90.1-2007, or its current equivalent, of the most current~~  
10 ~~national energy efficiency design standards, including the International Energy~~  
11 ~~Conservation Code or an energy efficiency code other than the International Energy~~  
12 ~~Conservation Code if that energy efficiency code is used to prescribe design~~  
13 ~~requirements for the purpose of conserving energy in buildings and is generally~~  
14 ~~accepted and used by engineers and the construction industry~~ American Society of  
15 Heating, Refrigerating and Air Conditioning Engineers.

16 **SECTION 13.** 101.027 (3) (a) 1. of the statutes is amended to read:

17 101.027 (3) (a) 1. A revision of standard 90.1-2007, or its current equivalent,  
18 of the International Energy Conservation Code American Society of Heating,  
19 Refrigerating and Air Conditioning Engineers is published.

20 **SECTION 14.** 101.027 (3) (b) 1. of the statutes is amended to read:

21 101.027 (3) (b) 1. If the department begins a review under sub. (2) because a  
22 revision of standard 90.1-2007, or its current equivalent, of the International  
23 Energy Conservation Code American Society of Heating, Refrigerating and Air  
24 Conditioning Engineers is published, the department shall complete its review of the  
25 energy conservation code, as defined in sub. (1), and submit to the legislature

1 proposed rules changing the energy conservation code, as defined in sub. (1), no later  
2 than 18 months after the date on which the revision of standard 90.1-2007, or its  
3 current equivalent, of the International Energy Conservation Code American  
4 Society of Heating, Refrigerating and Air Conditioning Engineers is published.

5 **SECTION 15.** 101.028 of the statutes is created to read:

6 **101.028 Energy performance and environmental design standards for**  
7 **certain public buildings, structures and facilities. (1)** In this section:

8 (a) "Energy Star standards" means the standards prescribed by the U.S.  
9 Environmental Protection Agency under 42 USC 7403 (g) for energy use in buildings.

10 (b) "LEED green building rating system" means the green building rating  
11 system of the U.S. Green Building Council designated as the leadership in energy  
12 and environmental design system or its current equivalent as determined by the  
13 department.

14 (c) "LEED silver level" means the performance level designated as the silver  
15 level under the LEED green building rating system or its current equivalent as  
16 determined by the department.

17 (d) "Minimum LEED performance requirements for the operation and  
18 maintenance of existing buildings" means the performance requirements so  
19 designated under the LEED green building rating system, as prescribed by the U.S.  
20 Green Building Council, or its current equivalent as determined by the department.

21 (e) "U.S. Green Building Council" means the United States Green Building  
22 Council or any successor organization that is substantially the same organization,  
23 as determined by the department.

24 (2) The department shall prescribe, by rule, standards for energy performance  
25 and environmental design in buildings, structures, and facilities which shall apply

1 to the extent required under ss. 13.48 (2) and (15), 16.84 (5), 16.856, 66.0902, and  
2 120.24. The standards shall be based upon the following standards or, if they are  
3 updated, their current equivalents:

4 (a) The LEED silver level of energy performance for new building construction.

5 (b) Minimum LEED performance requirements for the operation and  
6 maintenance of existing buildings.

7 (c) Energy Star standards.

8 (d) Energy performance standard 90.1-2007 of the American Society of  
9 Heating, Refrigerating, and Air Conditioning Engineers.

10 (e) Standard 62.1-2004 of the American Society of Heating, Refrigerating, and  
11 Air Conditioning Engineers.

12 (f) National energy efficiency design standards of the International Energy  
13 Conservation Code adopted the the International Code Council-2006.

14 (g) The Uniform Plumbing Codes-2006 promulgated by the International  
15 Association of Plumbing and Mechanical Officials.

16 (i) Indoor air quality guidelines for occupied buildings promulgated by the  
17 Sheet Metal and Air Conditioning Contractors' National Association, 2nd edition,  
18 2007.

19 (j) The International Plumbing Codes-2006 fixture and fitting performance  
20 requirements promulgated by the International Code Council.

21 (3) The department shall review a rule promulgated under sub. (2) whenever  
22 a revision of a standard on which the rule is based is published. The department  
23 shall complete its review of the rule and submit to the legislature a proposed rule  
24 changing the standard no later than 18 months after the date on which the revision  
25 of the standard is published.

1           **SECTION 16.** 101.05 (1) and (3) of the statutes are amended to read:

2           101.05 (1) ~~No~~ Except for rules promulgated under s. 101.028, no building code  
3 adopted by the department under this chapter shall affect buildings located on  
4 research or laboratory farms of public universities or other state institutions and  
5 used primarily for housing livestock or other agricultural purposes.

6           (3) ~~No~~ Except for rules promulgated under s. 101.028, no standard, rule, code  
7 or regulation of the department under this subchapter applies to construction  
8 undertaken by the state for the purpose of renovation of the state capitol building.

9           **SECTION 17.** 101.65 (1) (a) (intro.) of the statutes is amended to read:

10          101.65 (1) (a) (intro.) Exercise jurisdiction over the construction and inspection  
11 of new dwellings by passage of ordinances, provided such ordinances meet the  
12 requirements of the one- and 2-family dwelling code adopted in accordance with this  
13 subchapter. An ordinance under this paragraph may exceed the requirements of the  
14 one- and 2-family dwelling code that relate to energy conservation in the  
15 construction of new dwellings. Except as provided by s. 101.651, a county ordinance  
16 shall apply in any city, village or town which has not enacted such ordinance.

17          **SECTION 18.** 119.04 (1) of the statutes, as affected by 2009 Wisconsin Acts 60  
18 and 96, is amended to read:

19          119.04 (1) Subchapters IV, V and VII of ch. 115, ch. 121 and ss. 66.0235 (3) (c),  
20 66.0603 (1m) to (3), 115.01 (1) and (2), 115.28, 115.31, 115.33, 115.34, 115.343,  
21 115.345, 115.361, 115.365 (3), 115.38 (2), 115.445, 115.45, 118.001 to 118.04, 118.045,  
22 118.06, 118.07, 118.075, 118.10, 118.12, 118.125 to 118.14, 118.145 (4), 118.15,  
23 118.153, 118.16, 118.162, 118.163, 118.164, 118.18, 118.19, 118.20, 118.225, 118.24  
24 (1), (2) (c) to (f), (6) and (8), 118.255, 118.258, 118.291, 118.30 to 118.43, 118.51,  
25 118.52, 118.55, 120.12 (5) and (15) to (25), 120.125, 120.13 (1), (2) (b) to (g), (3), (14),

(17) to (19), (26), (34), (35), (37), (37m), and (38), 120.14, 120.21 (3), 120.24, and 120.25 are applicable to a 1st class city school district and board.

SECTION 19. 120.24 of the statutes is created to read:

**120.24 Energy and environmental design standards for school district**

**facilities. (1) In this section:**

(a) "LEED building rating system" means the rating system of the U.S. Green Building Council designated as the leadership in energy and environmental design system or its successor system as determined by the department. *has the meaning given in s. 16.856(1)(f)*

(b) "LEED silver ~~standard~~ <sup>level</sup>" means the LEED building rating system standard designated by the U.S. Green Building Council as the silver standard in effect on the effective date of this paragraph .... [LRB inserts date], or its successor standard as determined by the department. *has the meaning given in s. 16.856(1)(f)*

(c) "Major construction project" means a project for the construction of a building containing at least 10,000 square feet of enclosed space.

(2) Each school board shall ensure that the plans and specifications for each major construction project conform at a minimum to the <sup>requirements for certification at the</sup> LEED silver ~~standard of~~ <sup>level</sup> construction. *20-17*

(4) (3) Upon request, the department shall pay necessary LEED registration and certification fees for a major construction project on behalf of a school district. The department shall pay the fees from the appropriation under s. 20.255 (2) (ed).

SECTION 20. 145.133 of the statutes is created to read:

**145.133 Graywater systems. (1) In this section:**

(a) "Graywater" means wastewater generated from the use of a clothes washer, sink, shower, or bathtub.



(b) "Graywater system" means a system for the collection and reuse of graywater.

(c) "Rainwater system" means a system for the collection and reuse of rainwater generated from building roofs.

(2) The department shall promulgate rules that establish standards for the installation of graywater and rainwater systems. The standards shall authorize the reuse of graywater and rainwater within the building, or on the property surrounding the building, from which the graywater or rainwater was generated.

**SECTION 21. Initial applicability.**

(1) The treatment of section 13.48 (2) (jm) 2. and 3. of the statutes first applies with respect to projects approved and agreements entered into on the effective date of this subsection.

(2) The treatment of section 16.856 (2) of the statutes first applies with respect to projects for which design is commenced on the effective date of this subsection.

(3) The treatment of section 16.84 (5) of the statutes, the renumbering and amendment of section 13.48 (15) of the statutes, and the creation of section 13.48 (15) (b) of the statutes first apply with respect to leases of real property by the state that are entered into, renewed, or extended on the effective date of this subsection.

(4) The treatment of section 120.24 of the statutes first applies with respect to projects for which design is commenced on the effective date of this subsection.

(END)

Section

(4) (#) The treatment of 66.0902 (4) of the statutes first applies with respect to projects for which a request for proposal is issued by a political subdivision on the effective date of this subsection.

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**2009-2010 DRAFTING INSERT**  
**FROM THE**  
**LEGISLATIVE REFERENCE BUREAU**

LRB-3485/P6ins3  
JTK.....

INS 2A:

~~NCB~~

→ In addition, the bill directs DOA to promulgate rules that require the Building Commission to continue to apply all moneys available for its use under the authorized state building program during the period from January 1, 2015, to January 1, 2030, to achieve certification by the U.S. Green Building Council for greater percentages of the gross square footage of conditioned space owned or leased by state agencies as meeting LEED minimum performance requirements for the operation and maintenance of existing buildings by specified dates.

INS 7-20:

by agencies → 5. The building commission shall apply all moneys available for its use under the authorized state building program to achieve certification by the dates specified by rule of the department of administration under s. 16.856 (6) by the U.S. Green Building Council for not less than the percentages specified by that rule of the total gross square footage of conditioned space in buildings, structures, and facilities that are owned or leased on the dates specified by that rule, as determined by the department of administration under s. 16.856 (3), for meeting the minimum LEED performance requirements for the operation and maintenance of existing buildings, as defined in s. 16.856 (1) (h).

INS 13-2:

✓ (6) The department shall assess the feasibility of achieving certification by the U.S. Green Building Council for greater than 15 percent of the total gross square footage of conditioned space in buildings, structures, and facilities that are owned or leased by agencies, as determined under sub. (3) for meeting the minimum LEED performance requirements for the operation and maintenance of existing buildings

specify <sup>↑</sup> for purposes of s. 13.48(2)(jm) 5. <sup>↑</sup>

and shall, by rule, require the building commission to apply all moneys available for its use under the authorized state building program to achieve specified increased levels of certification by specified dates during the period from January 1, 2015, to January 1, 2030. <sup>↑</sup> and <sup>↑</sup> increased by which those levels are to be achieved

2009-2010 DRAFTING INSERT  
FROM THE  
LEGISLATIVE REFERENCE BUREAU

LRB-3485/P6insMES  
JTK/RNK/PG/MES:cjs:ph

INS 14-1

(e) (f) "Minority group member" has the meaning given in s. 560.036 (1) (f) (e) ← ✓

INS 14-2

*percent percent*  
(no 9) a person who is awarded such a contract by a political subdivision shall agree, as a condition to receiving the contract, that his or her goal shall be to ensure that at least 25% of the employees hired because of the contract will be minority group members and at least 5% of the employees hired because of the contract will be women. *A political subdivision* and shall also ensure that a contract for a major construction project *requires the project to*

INS 14-21

(4) A political subdivision shall ensure that the plans and specifications for each major construction project conform at a minimum to the requirements for certification at the LEED silver level. The political subdivision shall also ensure that the use and disposal of construction materials, ventilation components, indoor air quality performance, and water usage level for each major construction project conform to the standards specified s. 13.48 (2) (jm) 2. ✓

20-14

(c) "Conditioned space" means space that is designed to have controlled environmental conditions.

(d) "IECC standards" means the energy efficiency design standards promulgated by the department of commerce under s. 101.028 based upon the national energy efficiency design standards of the International Energy Conservation Code or their current equivalents as determined by the department of commerce under s. 101.028.

(e) "LEED green building rating system" means the green building rating system of the U.S. Green Building Council designated as the leadership in energy and environmental design system or its current equivalent as determined by the department of commerce under s. 101.028.

(f) "LEED silver level" means the performance level designated as the silver level under the LEED green building rating system or its current equivalent as determined by the department of commerce under s. 101.028.

(d) "Major construction project" means a project for the construction of a ~~state~~ building ~~structure or facility~~ that will, upon completion, contain at least 10,000 gross square feet of ~~conditioned~~ <sup>enclosed</sup> space or for the repair, renewal, renovation, or expansion of an existing ~~state~~ building ~~structure or facility~~ containing at least 10,000 gross square feet of ~~conditioned~~ <sup>enclosed</sup> space that affects more than 50 percent of the existing gross square feet of ~~conditioned~~ <sup>enclosed</sup> space in that building ~~structure, or facility~~.

(h) "Minimum LEED performance requirements for the operation and maintenance of existing buildings" means the performance requirements so designated under the LEED green building rating system, as prescribed by the U.S. Green Building Council, or its current equivalent as determined by the department of commerce under s. 101.028.

20-171

(i) "Zero net energy" means an energy consumption level under which a building, structure, or facility produces as much energy for electricity, heating, and cooling from renewable sources in any calendar year as the building, structure, or facility consumes during the same period.

(2) The department shall ensure that the plans and specifications for each major construction project conform at a minimum to the requirements for certification at the LEED silver level. The department shall also ensure that the

no H school board  
use and disposal of construction materials, ventilation components, indoor air quality performance, and water usage level for each major construction project conform to the standards specified s. 13.48 (2) (jm) 2.

(3) The department shall maintain a current inventory of the location and gross square footage of the conditioned space in all buildings, structures, and facilities that are owned or leased by any agency for its use or the use of another agency. The inventory shall include for each building, structure, or facility information concerning the conditioned space in the building, structure, or facility and whether the building, structure, or facility or any portion thereof is certified or eligible for certification by the U.S. Green Building Council as meeting the minimum LEED performance requirements for the operation and maintenance of existing buildings.

Each school board  
school district  
one of  
that is  
one of  
(3) Except as provided in sub (1), the department shall ensure that each building, structure, or facility that is constructed by or for the department and designated as a major construction project conforms to whichever of the following energy performance standards apply, based upon the year in which construction of the building, structure, or facility begins:

repair, renewal, renovations or expansion

20 - 17 : 2  
repairs, renewals, renovations,  
for which or expansion

1 (a) For a building ~~structure, or facility~~ the construction ~~of which~~ begins on or  
2 after the first day of the 7th month beginning after the effective date of this  
3 paragraph .... [LRB inserts date], but before January 1, 2015, the energy  
4 performance shall be at least 30 percent better than the energy performance under  
5 the ASHRAE standard or the IECC standards, whichever is the most stringent.

6 (b) For a building ~~structure, or facility~~ the construction ~~of which~~ begins after  
7 December 31, 2014, but before January 1, 2020, the energy performance shall be at  
8 least 70 percent better than the performance under the ASHRAE standard or the  
9 IECC standards, whichever is the most stringent.

10 (c) For a building ~~structure, or facility~~ the construction ~~of which~~ begins after  
11 December 31, 2019, but before January 1, 2025, the energy performance shall be at  
12 least 80 percent better than the energy performance under the ASHRAE standard  
13 or the IECC standards, whichever is the most stringent.

14 (d) For a building ~~structure, or facility~~ the construction ~~of which~~ begins after  
15 December 31, 2024, but before January 1, 2030, the energy performance shall be at  
16 least 90 percent better than the energy performance under the ASHRAE standard  
17 or the IECC standards, whichever is the most stringent.

18 (e) For a building ~~structure, or facility~~ the construction ~~of which~~ begins after  
19 December 31, 2029, the energy performance shall be 100 percent better than the  
20 energy performance under the ASHRAE standard or the IECC standards, whichever  
21 is more stringent, and the building ~~structure, or facility~~ shall consume zero net  
22 energy. <sup>as defined in s. 16-856(1)(i)</sup>

23 (5) Subsection (4) does not apply to the gross square footage of enclosed space  
24 of any building, structure, or facility that is dedicated for laboratory usage if the

## STATE OF WISCONSIN - LEGISLATIVE REFERENCE BUREAU

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20-5

(7) (a) ASHRAE standard ✓ has the meaning  
given in s. 16.856 (1)(b).

(7) (b) IECC standards ✓ has the meaning  
given in s. 16.856 (1)(d).